

Pedal Powered Pulses And Cereals Peeler Machine

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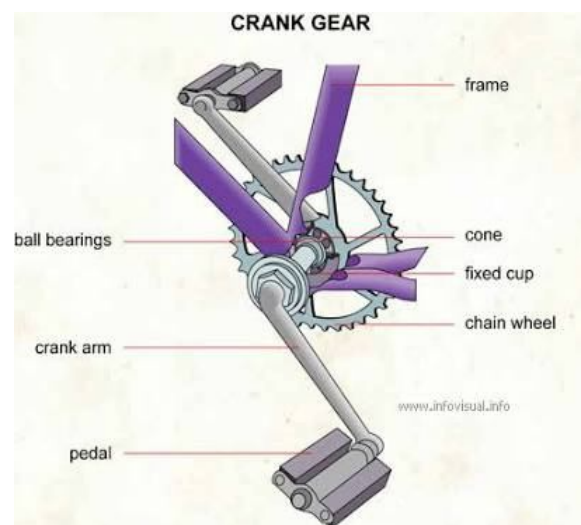
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Abstract- The pedal powered pulses and serials peeler machine is the project which is best option for rural area for there is a problem of electric supply. To run the pulses and serials peeler machine there is a need of electric power and most of villages of india are suffering from the problem and so overcome and to solve this problem we selected pulses and cereal peeler machine which operated manually. This project is low weight and portable to that easily. The pedal powered pulses and serial peeler machine is the project which is best option for rural area. This does not required any electric power supply or diesel supply. This project is low weight and portable to that easily transported. We use the simple cycling mechanism to run the machine.

conveyed by a roller chain, known as the drive chain or transmission chain, passing over sprocket gear with the teeth of gear meshing with the holes in the links of the chain putting mechanical force into the system.

PEDAL MECHANISM

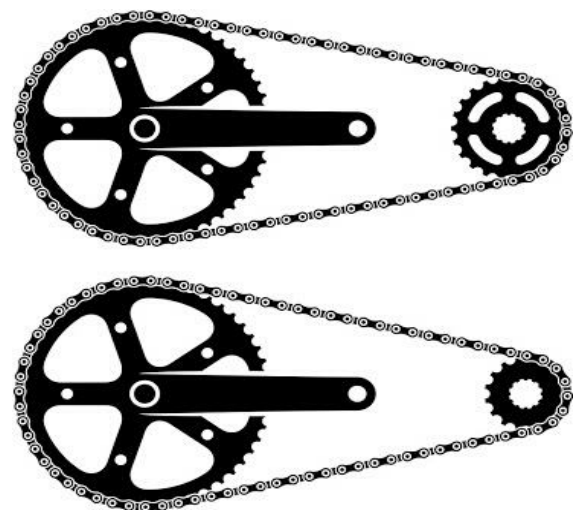


I. INTRODUCTION

The pedal power pulses cereal peeler machine, which runs on electric power, works on the principle of the conventional of rotational motion oscillatory motion. The bicycle also uses the same principle. To give shape to his idea, firstly buy an old bicycle from a scrap market, then cut pedals of the bicycles 8cm-12cm and it as per requirement and re-affixed the pedals to it.

The use a guide to control the mechanism which is pressurized the pulses as pea, chana, udad etc. So in this machine power is acquiring in the rotary motion by the pedal arrangement we are converting the pedal power in the rotary motion, by which chain and sprocket start its rotary motion and breaking the material.

CHAIN AND SPROCKET



II. WORKING

A pulses peeling machine is machine to peeling different types of pulses by rotary machine in our project the rotation of sprocket is possible through pedal rotation sprocket is rotated by chain drive when a person start pedaling the gear connected through sprocket by chain start to transmit power the rotation of sprocket is depending on man power. The rate of pulses peeling per hours is depending upon the rotation of sprocket in the project to complete processes is depend on chain drive. Chain drive is a way of transmitting mechanical power from one place to another it is also used in the wide variety machines besides vehicles. Most often, the power is

III. NEED OF MACHINE

[1] Agriculture is known as back bone of india but now days this backbone looks like suffering from spondylitis, that means our forming is depicting day by day for this reason we made this machine for supporting indian formers.

[2] Polished pulses available in market are mostly goes through the process of oil spreading and harmful chemical which are injurious to health therefore for getting healthy pulses we made this machine of pulses peeling.

[3] Polishing of pulses add extra cost for formers which we tried to eliminate.

[4] Polishing pulses are of high cost and companies which are selling unpolished pulses are also charged more for avoiding this we have made this machine at low cost.

[5] As machine is pedal operated this also helps to do exercise at home and we can also maintain good quality.



IV. LITERATURE REVIEW

[1] **International journal of innovative research in computer and communication engineering. Design and modification of pedal powered pulses peeler** Author Name: **V. Tirupati, R. Vishvanathan, K. Thangvel** Title Name: Intensive evolution of power operate pulses peeler. in this research paper it is reported that based on the selling action they can be divided into two category And operated and panel operate, a hand operate pulses peeler 2-3 kg per Hr. capacity was evaluated. Whereas a pedal operate groundnut decorticator was found to have capacity of about 12 kg per Hr.

[2] **International research journal of Engineering and technology (IRJET) Design and modification of pulses peeling machine** Laukik P. Raut: This paper start that this machine targets the small scale formers who have less production they conclude that the peeling cost using pedal machine is considerably less as compare to manual peeling or conventional peeling machine. The pulses peeling machine are

available in market are suitable for larger production, so this can be the best machine for the formers with less production.

V. CONCLUSION

We recognize this need and designed the machine from the start with low cost in mind. The machine will only contain parts that are readily available in rural areas. This eliminated the need to order or import components just for the pulses peeling machine. To help encourage the adoption of the pulses peeling machine we will run the multiple trials. The pulses peeling machine can be used by the urban people also while workout and exercise. It can serve dual purposes. While cycling the pulses can be peeling utilizing the pedaling of the human being, if the production of this pulses peeling machine is done at commercial scale then the total production cost of the machine can be reduced to 40% of estimated cost.

REFERENCES

- [1] Gagandeep Singh, Aishna Mahajan, Manoj Kumar Comparative Study of Tyre Rubber and V-Belt Rubber: Composition and Mechanical Properties IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684, p-ISSN: 2320-334X, Volume 12, Issue 5 Ver.1 (Sep-Oct.2015), PP60-65 www.iosrjournals.org
- [2] Meenakshi Malya, An Analysis of personal income Distribution in Rural Areas”, Indian Journal of Agricultural Economics 16(3), P. 187-196, 1961
- [3] Walde, Sudhir G, Tummala, Jyothirmavi, Lakshminarayan, Sudha. M. and Balaraman, Manohar 200. The effect of rice flour on pasting and particle size distribution of green gram (Phaseolus radiate, L. Wilczek) dried batter. International Journal of Food Science and Technology. 40:935-942.